



PSGR Krishnammal College for Women



DBT STAR STATUS

Newsletter - 2022

Department of Computer Science
Department of Information Technology
Department of Computer Applications

MESSAGE



It's a matter of pride for the departments of Computer Science, Information Technology and Computer Applications for being elevated to star status in the academic year 2019 - 2020. This news letter will serve as a window through which the training and wide exposure to the state-of-art practices carried out by the three departments to promote the interdisciplinary concept bioinformatics can be viewed. My Best wishes to all the faculty members to achieve success in all their future endeavors.

Dr. R. Nandini
Chairperson



I am pleased to know that the Department of Computer Science, Information Technology and Computer Applications had come out with a newsletter. The newsletter showcases the pool of activities organized by the departments to promote interdisciplinary research under DBT Star Status. I extend my hearty congratulations to the faculty members and students from the departments of Computer Science, Information Technology and Computer Applications for conducting interdisciplinary workshops, seminars and taking up projects in the field of computational biology which will eventually broaden up their horizon of knowledge.

Dr. N. Yesodha Devi
Secretary



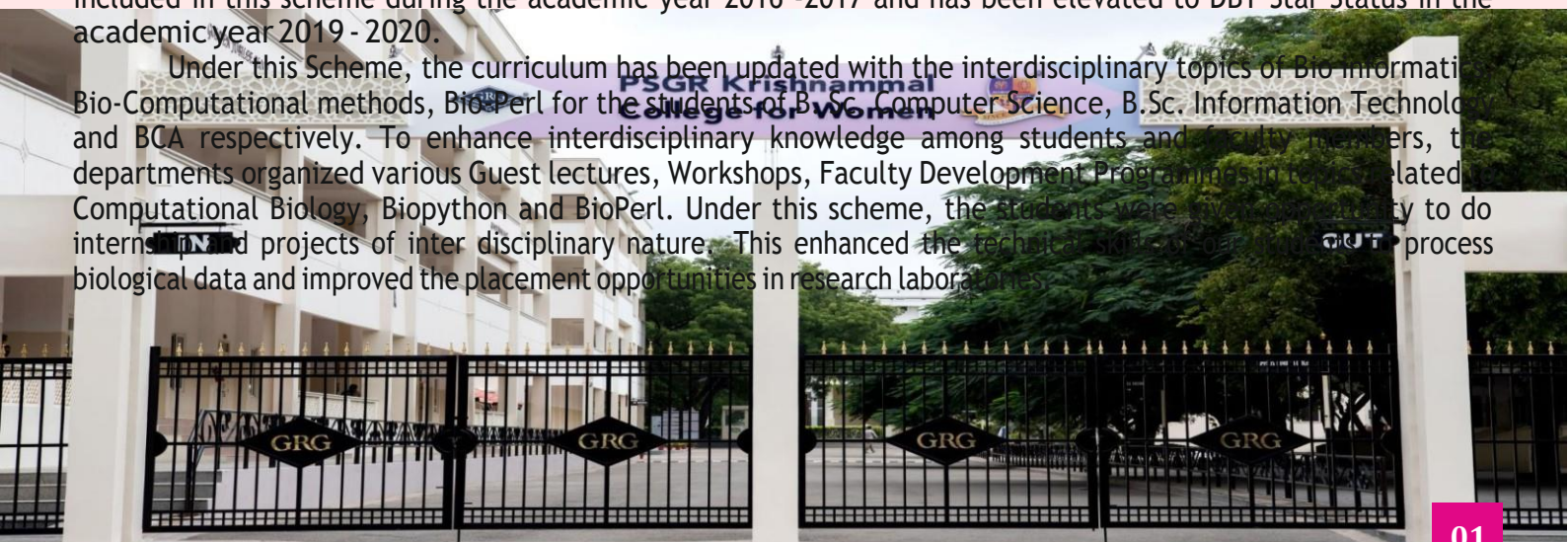
I am happy to find that the newsletter, prepared by the departments of Computer Science, Information Technology and Computer Applications carries the news of various activities organized by these departments under DBT Star Status. This newsletter provides a platform to showcase the events such as mentor meetings, workshops, guest lectures and industrial visits are been organized to promote interdisciplinary knowledge in Bioinformatics. This newsletter highlights the efforts taken by the faculty members and students to enrich the knowledge in computation technologies and tools. I congratulate the entire faculty team of all the three departments for their active involvement on planning, execution of events and bringing out this newsletter on the various activities carried out by them under this scheme.

Dr. S. Nirmala
Principal

ABOUT DBT STAR COLLEGE SCHEME

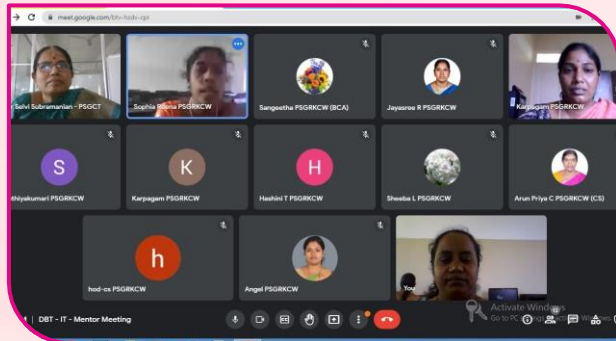
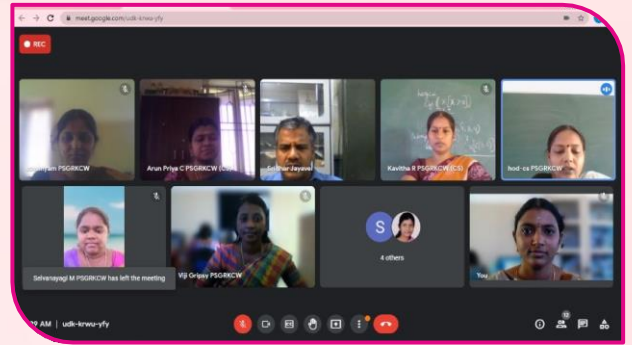
STAR COLLEGE SCHEME has been initiated by Department of Biotechnology, New Delhi, to support colleges and university departments offering undergraduate education to improve science teaching. The departments of Computer Science, Information Technology and Computer Applications of our institution has been included in this scheme during the academic year 2016 -2017 and has been elevated to DBT Star Status in the academic year 2019 - 2020.

Under this Scheme, the curriculum has been updated with the interdisciplinary topics of Bioinformatics, Bio-Computational methods, BioPerl for the students of B.Sc. Computer Science, B.Sc. Information Technology and BCA respectively. To enhance interdisciplinary knowledge among students and faculty members, the departments organized various Guest lectures, Workshops, Faculty Development Programmes in topics related to Computational Biology, Biopython and BioPerl. Under this scheme, the students were given opportunity to do internship and projects of inter disciplinary nature. This enhanced the technical skills of students in the process biological data and improved the placement opportunities in research laboratories.



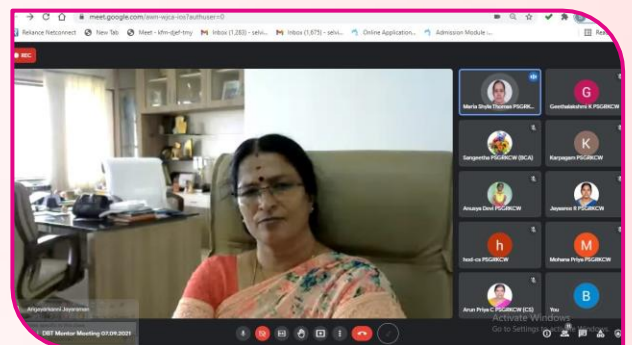
MENTOR MEETING

Dr. J. Sridhar, UGC-Commonwealth Doctoral Fellow-UK, Assistant Professor, Department of Biotechnology (DDE), Madurai Kamaraj University, Madurai, mentored the faculty members in the department of Computer Science. He gave suggestions towards students projects, resource person for organizing events and industrial visits during the mentor meeting organized by the department of Computer Science.

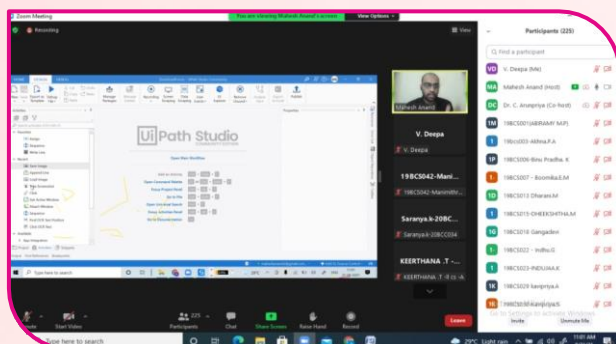


Dr. Selvi Subramanian, Professor, Department of Biotechnology, PSG College of Technology is the mentor for the department of Information Technology. She has discussed about the Computational Biology, Machine Learning & Deep Learning applications in Bioinformatics. And also suggested prominent industries to take up internships & projects.

The mentor meeting was organized by the Department of Computer Applications. Dr. J. Angaiyarikanni, Associate Professor & Head, Department of Microbial Biotechnology, Bharathiar University, Coimbatore has shared her ideas and views on bioinformatics research challenges, projects, workshops, tools & technologies and Industrial Visit.



GUEST LECTURES

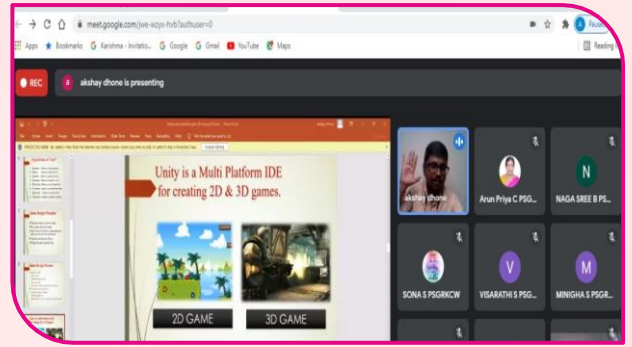


The department of Computer Science organized a guest lecture on Robotic Process Automation-Opportunities and Challenges. Mr. K. Mahesh Anand, Robotics Instructor, Brainobots, Kuwait delivered the lecture to nearly 12 faculty members and 120 students. The students gained ideas on the opportunities and challenges in the process of automation in various domains.

Guest lecture on Computerized Solutions to Life Science Problems-Project Ideas was organized by the department of Computer Science. Dr. R. Sridhar, Professor and Head, Department of Computer Science, Ramakrishna Mission Coimbatore delivered the lecture to a total of 112 students and 11 faculty members. The students gained ideas on various computerized solutions to life science problems.

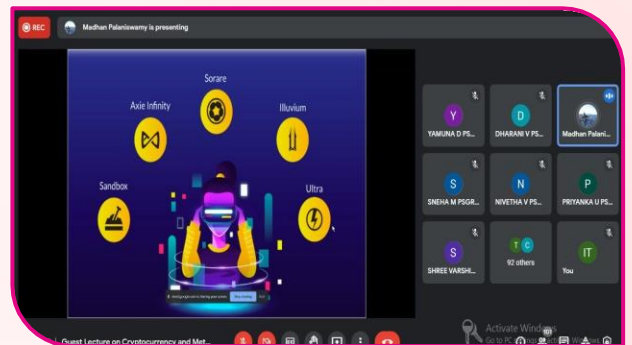


Mr. Akshay U Dhone, Android App Developer, Innovative Plans, Mumbai delivered a guest lecture on Applications of Unity and Vuforia. Around 12 faculty members and 146 students from the department of Computer Science attended this session. This lecture created awareness on the multi platform IDE Unity and students gained ideas to develop marker based applications.



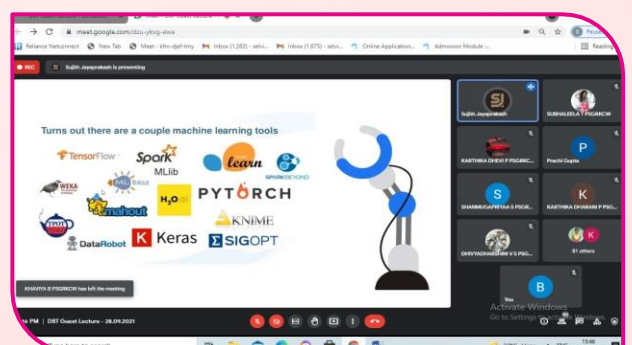
Guest lecture on Synthetic Biology was organized by the department of Information Technology. Dr. Joseph Selvin, Professor, Department of Microbiology, School of Life Sciences, Pondicherry University delivered the lecture to 117 students and 9 faculty members. Students acquired knowledge in enabling the design of new biological systems, genetic circuits and molecular component.

Mr. Madhan Palaniswamy, LEVI Financial Consulting, Coimbatore delivered a lecture on Cryptocurrency and Metaverse organized by the department of Information Technology. He shared his knowledge about Cryptocurrency concepts that go hand-in-hand - virtual worlds and virtual money. Around 112 students and 5 faculty members were benefited.

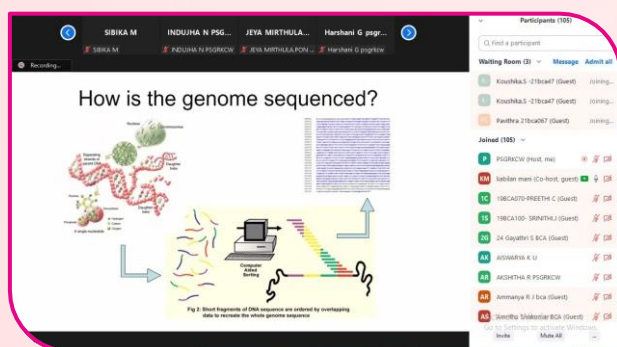
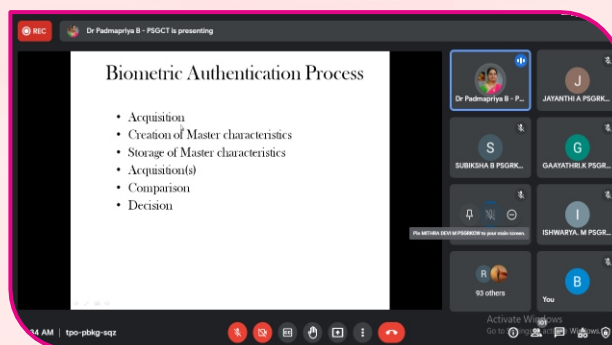


The department of Information Technology organized a guest lecture on Block Chain Network for IoT Applications. Mr.Kandha Sankarapandian, Solutions Architect Manager, Amazon Web Services, USA delivered a lecture to a total of 114 students and 6 faculty members. The students acquired insights on Block Chain technology for IoT Applications.

Guest Lecture on the topic Machine Learning and Big Data handled by Dr. Sujith Jayaprakash, Blue Christ University, Ghana organized by the Department of Computer Applications. Students are exposed to the Machine Learning and Big Data Techniques. Around 9 faculty members and 320 students were benefited.



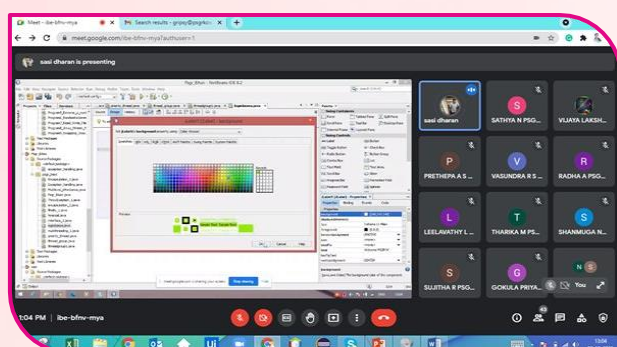
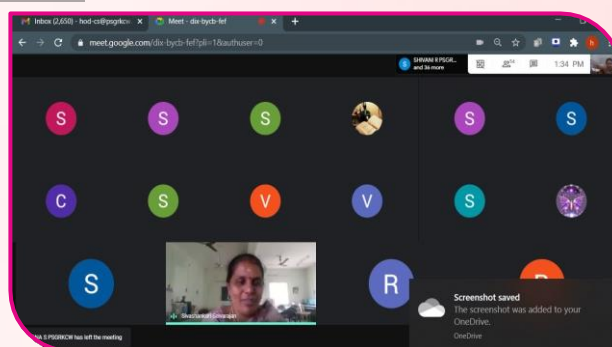
Guest Lecture on the topic Biometric Based Authentication handled by Dr. B. Padma Priya, Assistant Professor, Department of Biomedical Engineering, PSG College of Technology, Coimbatore organized by the Department of Computer Application. Guest give a clear view on the Authentication process. Around 9 faculty members and 320 students were benefited.



Guest lecture on Careers in Bioinformatics and Computational Biology was delivered by Dr. Kabilan Mani, Assistant Professor, Research - PSG IMSR, Coimbatore. Students gained knowledge in the career opportunity in Bioinformatics field. Around 9 faculty members and 320 students were benefited.

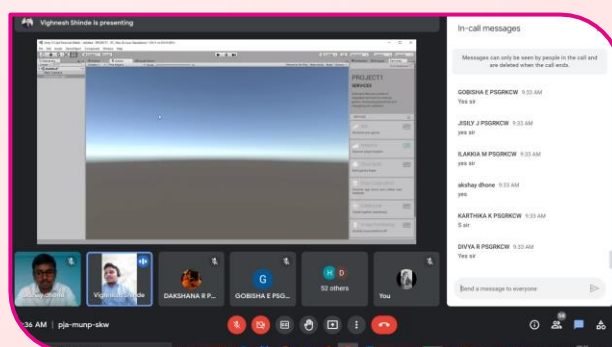
WORKSHOPS

The department of Computer Science organized a workshop on Online Database and Tools of Biological Tools. Dr. S. Shiva Shankari, Assistant Professor, Department of Bio-Informatics, Nirmala College for Women, Coimbatore was the resource person. A total of 112 students from II B.Sc. Computer science were benefited. The students gained hands on experience to analyse biological data using online tools.

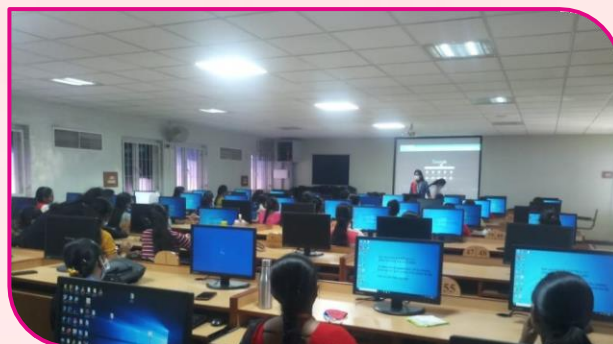


Workshop on Java Applet Programming was organized by the department of Computer Science. Mr. J. Dhanasekaran, Software Developer, Seattle Technologies, Coimbatore was the resource person. Around 118 students from III B.Sc. Computer Science got benefited. He demonstrated applet methods to develop a real world projects and shared his expertise in application of Java in various domains.

Marker Based Applications Using Augmented Reality workshop was organized by the department of Computer Science. Mr. Akshay U Dhone and Mr. Vignesh Shankar Shinde, Android App Developer, Innovative Plans, Mumbai provided hands on experience to develop 2D and 3D games using marker based concepts in Unity. Around 112 students of II B.Sc. Computer Science got benefited.

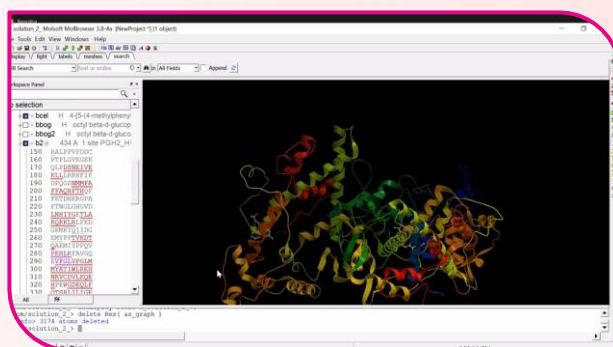


Workshop on Python Programming was organized by the department of Computer Science. Mr. X. Levale, Software Developer, Litz Technology, Coimbatore was the resource person. He demonstrated various Python packages to develop real world projects. Around 118 students from II B.Sc. Computer Science got benefited.



A Workshop on Java Programming was organized by the department of Computer Science. The resource person was Mr. J. Dhanasekaran, Software Developer, Seattle Technologies, Coimbatore. He demonstrated various Java Packages, JDBC connectivity and some real time project ideas. Around 114 students of I B.Sc. Computer Science got benefited.

Workshop on Drug and Discovery Techniques was conducted by Dr. Vijay. V, Technical Consultant - Research, Accent Techno Soft, Coimbatore was organized by Department of Information Technology. Students obtained knowledge in computational methods effectively in various phases of the drug discovery and development pipeline. 119 students of II B.Sc Information Technology and 2 faculty members were benefited.

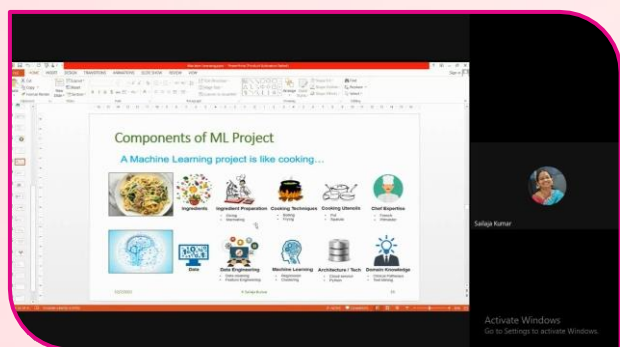
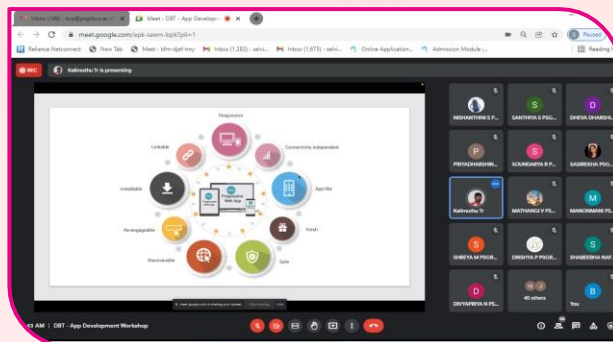


The department of information technology organized a workshop on Internet of Things for Biosensor Mr. Mani Jayaram, GRT Embedded Solutions, Coimbatore was the resource person. A total of 115 students from III B.Sc Information Technology were benefited. Students gained hands-on training in IoT applications to develop interdisciplinary projects.

Interdepartmental Workshop on PHP with MySQL conducted by Mr. Gokula Krishnan, Project Manager, Nxtlogic Software Solutions, Coimbatore was organized by the Department of Information Technology. 60 students from various Science departments were benefited. Students were trained to develop web application.

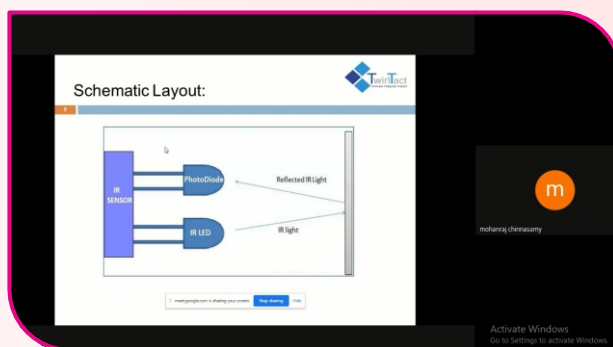


The department of Computer Applications organized workshop on Workshop on App Development was conducted by T R Kalimuthu, Technical Lead, Full Stack Developer, Latent View Analytics, Chennai. 60 Students and 2 faculty members were benefited. Students are trained to develop small mobile apps

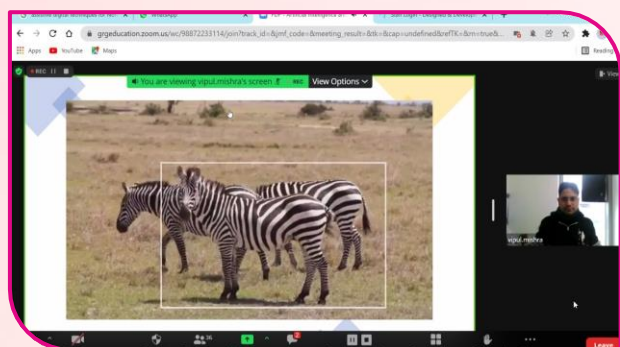


Workshop on Big Data was conducted by Dr. K. Sailaja Kumar, Associate Professor, Department of Computer Applications, MS.Ramaiah Institute of Technology, Bangalore organized by the Department of Computer Applications. 60 students and 2 faculty members were benefited. Students gained more knowledge in using big data projects

Interdepartmental Workshop on IoT in Bioinformatics Applications was conducted by Mr. Mohammed Ali, Marketing Head, Twiril Tact, Coimbatore organized by Department of Computer Applications. 60 students from various science departments were benefited. Students are given training in develop in small IoT applications.

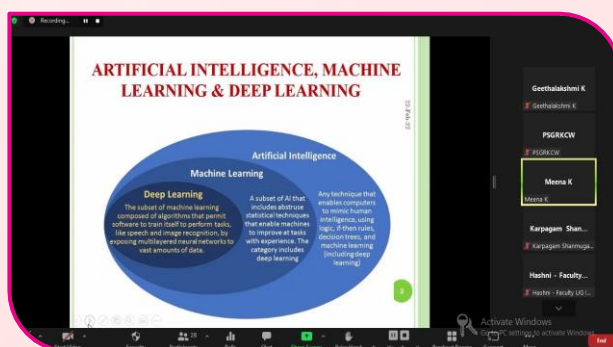


FACULTY DEVELOPMENT PROGRAMMES

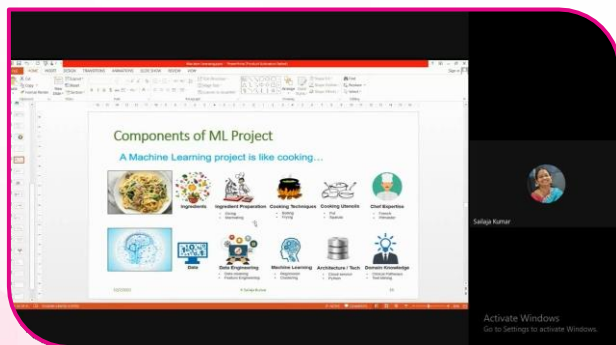


The department of Computer Science organized a Interdepartmental faculty development programme on Artificial Intelligence and Machine Learning. Around 46 faculty members from various science departments of our college had participated. The session was handled by Mr. Vipul Mishra, Associate Professor, Bennett University, Noida, Uttar Pradesh. The faculty members were exposed to various artificial intelligence and machine learning algorithms to motivate students to create innovative projects.

The department of Information Technology organized an Interdepartmental faculty development programme on Bioinspired Computing. The session was handled by Dr.K.Meena, Professor, Department of Computer Science and Engineering, Vel Tech Rangaraj Dr. Sagunthala R & D Institute of Science and Technology, Chennai. Around 31 faculty members from various departments of our college has participated. The faculty members were gained insights to apply machine learning & deep learning to process biological data.

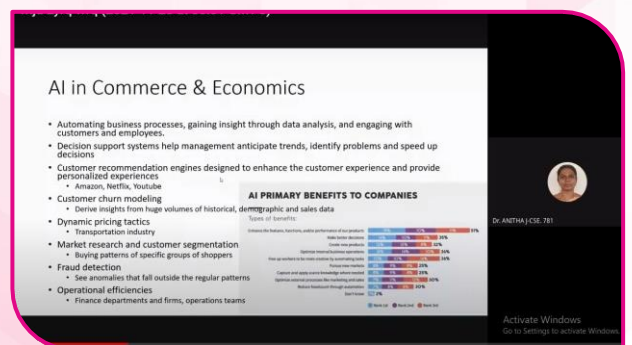


Inter Departmental Faculty Development Programme organized by Department of Computer Applications. Dr. J. Anitha, Associate Professor, Department of Computer Science and Engineering, Karunya University, Coimbatore conducted the programme on AI and its Applications. Around 50 faculty members from various science departments got benefited.

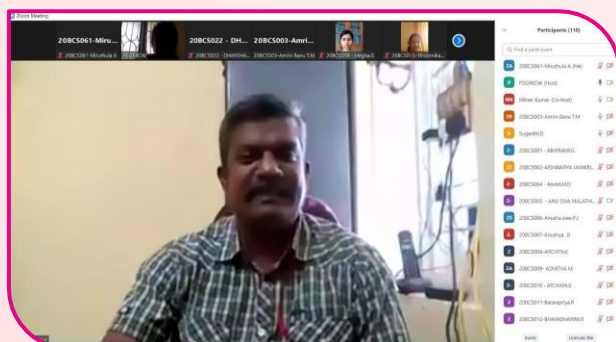


The departments of Computer Science, Information Technology and Computer Applications organized the National Level Workshop on Research Article Writing and Publishing with Citation. The resource persons were Mr. Raja Visvanathan, Scientist-B (Computer Science) INFLIBNET Centre, An IUC of University Grant Commission (UGC) Gandhinagar, Gujarat, Dr. N. Prasanna, Associate Professor, Department of Economics, Bharathidasan University, Tiruchirappalli and Dr. J. N. Swaminathan, Managing Editor, Technoarete group, Chennai. Around 53 Research scholars and 183 faculty members of various institutions from all over India participated in the event. The participant gained awareness on the strategies to publish articles in scopus indexed journals.

The Science departments organized the Interaction Programme - Science Adda under the aegis of Azadi Ka Amrit Mahotsav. The resource persons were Dr. M.G. Sethuraman, Professor, Department of Chemistry, The Gandhigram Rural Women, Dindigul, Dr. N. Ponpandian, Professor and Head, Department of Nanoscience and Technology, Bharathiar University, Coimbatore, Dr. Raghunath O. Ramabhadran, Assistant Professor, Department of Chemistry, ISER Tirupathi, Dr. M. Saravanakumar, Head, Biotechnology RasiSeeds(P) Ltd, R&D Centre, Attur, Dr. K. Vaideki, Associate Professor, Department of Applied Sciences, PSG College of Technology, Coimbatore and Dr. R. Rajendran, Associate Professor, Department of Microbiology, PSG College of Arts and Science, Coimbatore. Around 1236 students of various schools attended the event. The school students gained knowledge on the importance of science in day today basis.

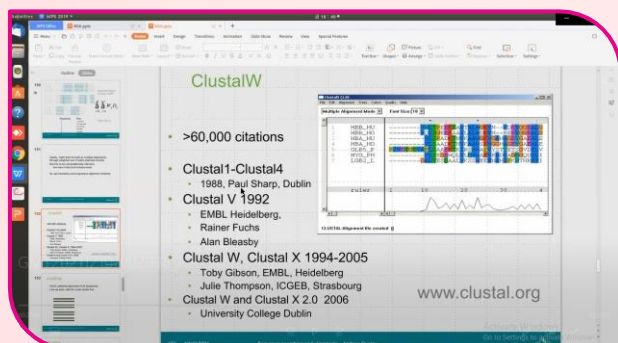
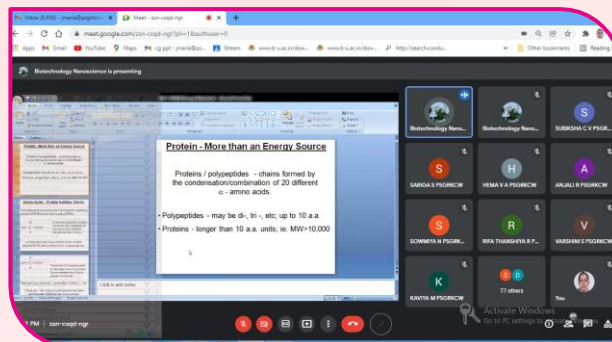


ADJUNCT FACULTY



Dr. M. Milner Kumar, Propreitor, BlackBuck Technologies, Chennai served as an adjunct faculty and handled sessions on the topic Bioinformatics - Python Programming. A total of 118 II B.Sc. Computer Science students and 5 faculty members were benefited. The resource person created awareness on the functions use to analyze biological data using Python.

Dr. R. Ragunathan, Centre for Bioscience and Nanoscience Research, Coimbatore served as an adjunct faculty and handled session on the topic Bioinformatics. A total of 115 I B.Sc. Information Technology Students were benefited. The resource person created awareness on bioinformatics tools, Databases, Sequence Alignment, Protein Structure.



Adjunct Faculty on Bioinformatics was delivered by Dr. S. Divya, Post-doctoral Researcher, Konkuk University, Seoul, South Korea for 10 Days. 120 first year students were benefited.

INTERDEPARTMENTAL COMPETITIONS

Inter departmental Competition TechiTrendz'22 was organized by the Departments of Computer Science. Nearly 280 students of Computer Science, Computer Science with Cognitive Systems, Information Technology and Computer Applications actively participated in various events such as Quiz, PowerPoint Presentation and logo creation.



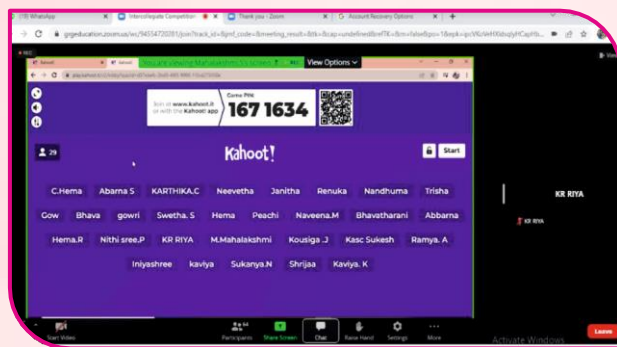
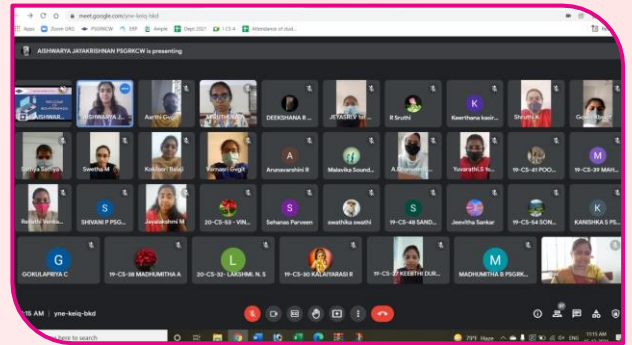
Interdepartmental competition BIOESPARANZA - 2021 was conducted by the Department of Information Technology. Around 86 students of Physics, Chemistry, Mathematics, Botany, Zoology, Computer Science, Information Technology and Computer Applications, Commerce of our college actively participated in the events Master Minds, Connexions, Bowl of Nuggets, Jigsaw.

Inter Departmental Competition Zinesis was organized by the Department of Computer Applications. 110 students from various departments were benefited.



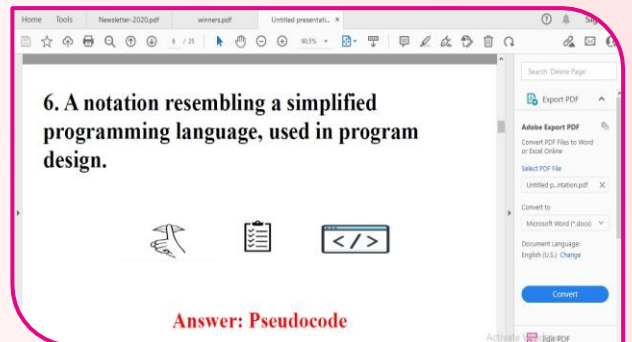
INTERCOLLEGIATE COMPETITIONS

Inter Collegiate Fete BioHyphenzia'22 was organized by the Department of Computer Science. Around 440 students from 12 institutions in and around Coimbatore showcased their talents in the event. The first prize was won by Ms. M. Sathya, Sri GVG Visalakshi College for Woman, Udumalpet. The second prize was won by Ms. S. Sandhya, Nallamuthu Gounder Mahalingam College, Pollachi and the third prize was won by Ms. M. Sowmiya, St Joseph's College for Women, Tirupur.



Inter Collegiate Fete BioHyphenzia 2022 - BioConcurso was organized by the Department of Information Technology. Around 95 students from various institutions in and around Tamilnadu showcased their talents. The first prize was won by KR Priya, A.V.P. College of Arts and Science, Tirupur. The second prize was won by Naveen B from Sri Krishna Arts and Science College, Coimbatore and the third prize was won by Surthika M, Sri Ramakrishna College of Arts and Science, Coimbatore.

Inter Collegiate Fete BioHyphenzia - Tech Intellect was organized by the Department of Computer Applications. Around 200 students from 15 institutions in and around Coimbatore showcased their talents. The first prize was won by Vaishnavi. A. H from Rathinam College of arts and science, Coimbatore. The second prize was won by Gowsi.G from Dr.N.G.P College of arts and science, Coimbatore and the third prize was won by Kavyashree. P, Suguna College of Engineering and fourth prize was shared by Aakash. M, PSG College of pharmacy, Coimbatore and Kiran Vishali. R from Sri Krishna College of Technology, Coimbatore



TRAINING ATTENDED

- ❖ One faculty from the department of Computer Science attended the faculty development programme on Cognitive Intelligence: Foundations & Applications organized by Vellore Institute of Technology, Vellore.
- ❖ Two faculty members from the department of Computer Science attended the Short Term programme on Block Chain Technology, organized by Vivekanandh Education Society's Institute of Technology, Mumbai
- ❖ Two faculty members from the department of Computer Science attended the National level seminar on Data Science for Genomics and Precision Medicine organized by KPR Institute of Engineering and Technology, Coimbatore.
- ❖ Two faculty members from the department of Computer Science attended the faculty training programme on Deep Learning using Python organized by PSG College of Technology, Coimbatore.
- ❖ Four Students of III B.Sc. Computer Science attended the National level seminar on Data Science for Genomics and Precision Medicine organized by KPR Institute of Engineering and Technology Coimbatore .

- ❖ Six Students of II B.Sc Computer Science attended the International Conference on Intelligent Computing and Technology organized by Sri Ramakrishna College of Arts and Science, Coimbatore.
- ❖ One faculty from the department of Information Technology attended ten days Faculty Development Program on Cognitive Intelligence: Foundations & Applications on at E & ICT Academy at NIT Warangal in association with VIT Chennai.
- ❖ One faculty from the department of Information Technology attended three days International Online Workshop on Data Management and Analysis using R-Commander conducted by Institute for Statistics and Analytical Research, Chennai.
- ❖ Two faculty members from the department of Information Technology attended a National Level Seminar on Data Science for Genomics & Precision Medicine conducted by KPR Institute of Engineering and Technology, Coimbatore
- ❖ Two faculty members from the department of Information Technology attended the training programme on Neural Networks & Deep Learning using Python organised by Department of Biomedical Engineering, PSG College of Technology, Coimbatore
- ❖ Four Students attended a National Level Seminar on Data Science for Genomics & Precision Medicine conducted by KPR Institute of Engineering and Technology, Coimbatore
- ❖ One student of III B.Sc Information Technology attended the Student Development Program on Website Designing on WordPress Basics by E & ICT Academy, IIT Kanpur
- ❖ Five Students of B.Sc Information Technology participated in the Virtual International Conference on Intelligent Computing and Technology, Organized by Sri Ramakrishna College of Arts & Science, Coimbatore
- ❖ Five Students of II B.Sc Information Technology attended the workshop on Applications of Artificial Intelligence and Machine Learning organised by the department of Computer Science, PSGR Krishnammal College for Women, Coimbatore
- ❖ Five Students of II B.Sc Information Technology attended the workshop on Internet of Things organised by the department of Computer Applications, PSGR Krishnammal College for Women, Coimbatore.
- ❖ One faculty from the department of Computer applications attended ten days Faculty Development Programme on Cognitive Intelligence: Foundations & Applications at E & ICT Academy at NIT Warangal in association with VIT Chennai.
- ❖ Two faculty members from the department of Computer applications attended Five days Faculty Development Programme on Mango DB organised by E & ICT Academy, IIT Kanpur.
- ❖ Two faculty members from the department of Computer applications attended National Level Seminar on Data Science for Genomics & Precision Medicine organised by KPR Institute of Engineering and Technology Coimbatore.
- ❖ One faculty from the department of Computer applications attended one day International Online Workshop on Data Management and Analysis using R organized by Institute for Statistics and Analytical Research.
- ❖ Two faculty members from the department of Computer applications attended online two days Training programme on Neural Networks and Deep Learning using Python organized by PSG College of Technology, Coimbatore.
- ❖ Four Students attended National Level Seminar on Data Science for Genomics & Precision Medicine organised by KPR Institute of Engineering and Technology Coimbatore.
- ❖ Six Students attended five days Student Development Programme on Mango DB organised by E & ICT Academy, IIT Kanpur.

RESEARCH PUBLICATIONS

- ❖ V. Revathi, D. Vidhya Devi, S. Karpagavalli, C. Arunpriya Marker Based Augmented Reality Experience to Trees, Webology, Vol. No: 19; Issue No: 2, Feb 2022, PP. No: .3371-3381, ISSN:1735- 188X- Indexed by Scopus.
- ❖ Akshaya S. V, Kalaiselvi. R, C. Arunpriya, J. Viji Gripsy, N. Deepa Feature extraction of western Ghats, Natural Volatiles and essential oils, Vol. No: 8; Issue No: 6, Dec 2021, PP. No: 5116 -5124. ISSN: 2148-9637 - Indexed by Scopus.

- ❖ M. Rajalakshmi, Dr. S. Karpagavalli, Dr. R. Kavitha, Flower Classification Based on Deep Learning using TensorFlow, Natural Volatiles and essential oils, Vol. No: 8; Issue No: 6, Dec 2021, PP. No: .5125 - 5131. ISSN: 2148-9637 - Indexed by Scopus.
- ❖ Vijayalakshmi. K Rasika. S, Mrs. V. Deepa, Mrs. S. Ponmalar, A Survey: IOT Based Home Security and Automation System, International Journal of Mechanical Engineering, Vol. No: 7; Issue No: 2, Jan 2022, PP. No: 6710-6713. ISSN: 0974-5823- Indexed by Scopus.
- ❖ Dr. R. Vishnupriya, Ms. P. Parvathi, IOT Based Street light controlling System, International Journal of Mechanical Engineering, Vol. No: 7; Issue No: 1, Jan 2022, PP. No: 6716-6725. ISSN: 0974-5823- Indexed by Scopus.
- ❖ K. Vinodhini, S. Kavitha, T. Saranya, K. Geethalakshmi, Molecular Analysis of Bacteria isolated from soil for its potential agnostic activity, Research Journal of Science and Technology, Vol. No: 9; Issue. No: 15, 2022.
- ❖ S. Indhumathi, Mrs. T. S. Anushya Devi, Mrs. M. Selvanayaki, Hydricum Flavum extracts on Controlling Pathogenic Microbe Acinetobacter Baumannii, Research Journal of Pharmacy and Technology.

SEQUENCE PUBLICATIONS

- ❖ MZ410562 - Serratia sp. strain BCA CBNR 16S ribosomal RNA gene, partial sequence
- ❖ ON556672 - Pseudomonas stutzeri strain BCA3 16S ribosomal RNA gene, partial sequence
- ❖ ON556569 - Priestia endophytica strain BCA2 16S ribosomal RNA gene, partial sequence.
- ❖ ON556570 - Pseudomonas stutzeri strain BCA2 16S ribosomal RNA gene, partial sequence.
- ❖ ON668105 - Pathogenic Bacteria strain BCA2 16S ribosomal RNA gene, partial sequence
- ❖ ON556499-Lactiplantibacillus plantarum strain BSc IT 2 16s ribosomal RNA Gene Partial sequence is Published.
- ❖ ON556502- Lenzites betulinus isolate BSc IT 3 small subunit ribosomal RNA Gene ,Partial sequence is published.
- ❖ ON556497-Priestia endophytica strain BSc IT 1 16s ribosomal RNA gene,partial sequence is published.
- ❖ ON567104- Phanerochaete sp.isolate BSc IT 4 small subunit ribosomal RNA gene,partial sequence is published.

ONLINE COURSES

- ❖ 229 Students of II & III B.Sc Computer Science had completed more than 5 online courses on disruptive technologies in New India Learnathon 2021 organized by ICT Academy.
- ❖ 285 Students of II & III B.Sc., Computer Science had completed the online course STEP into RPA in Skillathon 2021 organized by ICT Academy.
- ❖ 118 Students of II B.Sc., Computer Science had completed Introduction to GoLang, Mobile Interface and Cyber Security through Coursera online courses.
- ❖ 231 Students of II & III B.Sc., Information Technology has completed Internet of Things course through NASSCOM.
- ❖ 171 Students of II & III B.Sc., Information Technology has completed Machine Learning & Image Processing course through NASSCOM.
- ❖ 110 Students of II B.Sc., Information Technology has completed Enhancing Soft Skills and Personality course through NPTEL.
- ❖ 59 Students of I B.Sc., Information Technology has completed various courses like Oracle Cloud Infrastructure Foundations, Cloud Computing Basics, Data Analysis on AWS through Coursera.
- ❖ 12 Students of II B.Sc., Information Technology has completed various online courses through Intershala.
- ❖ 116 students of II BCA has completed C++ Programming through Spoken Tutorials, IIT Bombay.
- ❖ 40 students of II BCA has completed DBMS through NPTEL.

INTERFACE MEETING

Interface Meeting on Bioinformatics and Big Data Analytics by Dr. N. JEYAKUMAR, M.Sc., Ph.D., Professor & Head, Dept. of Bioinformatics, Bharathiar University, Coimbatore on 18 th March 2022. Around 214 Students and 15 Faculty members were benefited.



Interface Meeting on Effective Learning Methods by Dr. U. S. Ragupathy, Head & Associate Professor, Department of Electronics and Instrumentation Engineering, Kongu Engineering College, Erode, on 22nd March 2022. Around 50 Students and 5 Faculty members were benefited.

INTERNSHIP

Internship help the students to develop and refine their skills in biological data base, tools and technologies of bioinformatics. 12 students of B.Sc. Computer Science, 16 students of Information Technology and 16 students of BCA have undergone training in application areas of bioinformatics. Few of them are listed below.

- ❖ Study on Mobile Application for Forestry Classification, Surabhi Nursery and Landscapes, Coimbatore.
- ❖ Twitter BOT using Tweepy in Python, E-Soft IT Solutions, Trichy.
- ❖ Billing System of Dhavanthri diagnostics & Surgical Distributors, Dhanvanthri Diagnostic and Surgical Distributors, Coimbatore.
- ❖ Solar Ongrid Management System, Solar Off grid System, Ups, Kondass Automation Pvt.Ltd, Coimbatore.
- ❖ Website Development for botanical species management system, Graphic Bridge, Coimbatore.
- ❖ Drug Molecule Prediction at BioXplora, Coimbatore.
- ❖ Gene Prediction Tools at BioXplora, Coimbatore.
- ❖ Genetic diversity study of bacillus bacteria at Centre for Bioscience and Nanoscience Research, Coimbatore.
- ❖ Molecular diversity study of pseudomonas at Centre for Bioscience and Nanoscience Research, Coimbatore.
- ❖ Molecular Study of Chlorella Sorokiniana at Centre for Bioscience and Nanoscience Research, Coimbatore.
- ❖ Multiple Sequence Alignment and Phylogenetic Tree Prediction at BioXplora, Coimbatore.
- ❖ KEGG Pathway at BioXplora, Coimbatore
- ❖ Insilico Drug Structure at BioXplora, Coimbatore.
- ❖ Protein Structure and Parametric Analysis at BioXplora, Coimbatore.
- ❖ Industrial Important of Bacillus at Centre for Bioscience and Nano Science, Coimbatore.
- ❖ Genetic Diversity Study of Staphylococcus Bacteria at Centre for Bioscience and Nano Science, Coimbatore.
- ❖ Genetic Diversity of Entire Bacteria at Centre for Bioscience and Nano Science, Coimbatore.
- ❖ Sequence Comparison and Phylogeny at BioXplora, Coimbatore.

PROJECTS

Projects, prepare students to solve real-world problems. 20 students of B.Sc. Computer Science, 26 students of Information Technology and 11 students of BCA undertook projects in Bioinformatics. Few of them are listed below. Few of them are listed below.

- ❖ Augmented reality for Botanical Specimens, PSGR Krishnammal College for Women.
- ❖ Leaf Classification using Deep Learning, Shifa Clinical Laboratory, Coimbatore.
- ❖ RPA-Assessment calculation for Colleges and automation to email, PSGR Krishnammal College for Women.
- ❖ RPA-COVID Report generation using Uipath, Kovai Technologies, Coimbatore.
- ❖ Blood cell identification using image processing, Shifa Clinical Laboratory, Coimbatore.
- ❖ RPA- Automation of PaySlip, Alvin Industries, Coimbatore.
- ❖ Lung cancer detection using Machine Learning Pseudoscripts, Coimbatore.
- ❖ Birds Classification based on sound, Sri Sivanmalai Andavar Ginning Factory, Tirupur Comparison
- ❖ of Marine Compounds and Synthetic Compounds against Diabetes at BioXplora, Coimbatore. Smart Key
- ❖ Tag using IoT at Maylancer Techios, Coimbatore.
- ❖ Diabetics Prediction using Machine Learning at Accent Techno Soft, Coimbatore.
- ❖ Molecular Diversity of Probiotic bacteria from Commercial Cheese and its Genetic analysis at Centre for Bioscience and Nanoscience Research, Coimbatore.
- ❖ Duster Cleanser using IoT at Maylancer Techios, Coimbatore.
- ❖ Smart Pill Box at Maylancer Techios, Coimbatore.
- ❖ Study of Potential Antiviral Compound against Base function of Cov-3C at BioXplora, Coimbatore.
- ❖ Biosensor to Detect Abnormalities in Thyroid at SKI Embedded Solutions, Coimbatore.
- ❖ Arduino workplace alcohol detector with reporting through SMS, Twirltact, Coimbatore.
- ❖ Border and weather alert system for fishermen, Twirltact, Coimbatore.
- ❖ Vending machine for sanitary napkin with SMS alert, Twirltact, Coimbatore.
- ❖ Graphical password authentication system, AAKKAM, Coimbatore.
- ❖ Fish culture automation, Twirltact, Coimbatore.
- ❖ Breast Cancer Detection using Machine Learning, Accent Techno Soft, Coimbatore.
- ❖ Image regeneration for old damaged reel picture, Accent Techno Soft, Coimbatore.

OUT-REACH ACTIVITY

Community Development program on Handmade Jewellery was organized by the Department of Information Technology at Universal Peace Foundation, Nalla Goundan Palayam. Around 21 women from the Ashram, 10 students and 2 faculty members were benefited.



The Department of Information Technology in association with RWTP organized an outreach activity on the topic EmproTech Skills for the rural women in and around annur. The women were trained to design their creativity digitally. Around 18 women, 10 students and 2 faculty members were participated.

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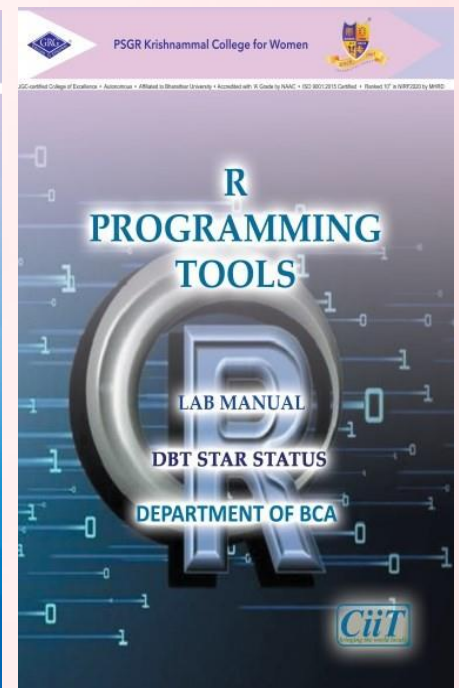
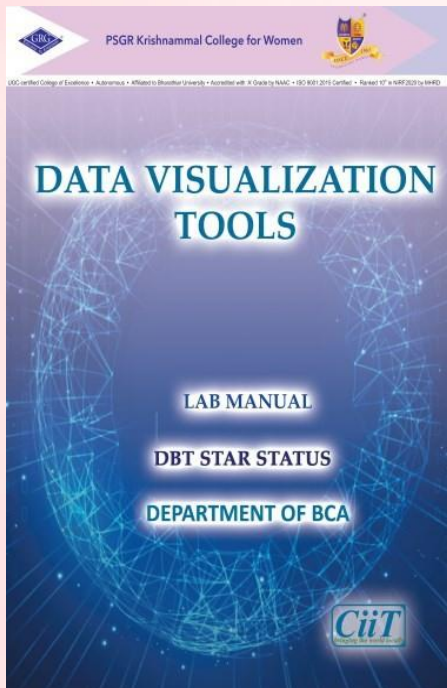
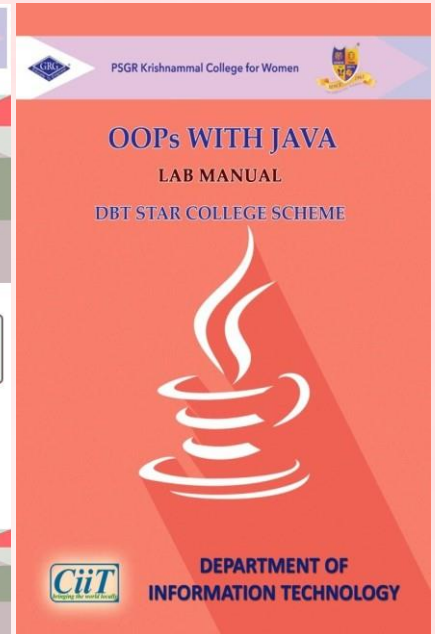
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MENTORING OTHER INSTITUTIONS

The departments of Computer Science, Information Technology , Computer Applications shared their expertise to the departments under DBT Star Scheme in Jamal Mohamed College, Tiruchy and Sri S. Ramasamy Naidu Memorial College, Sattur, A.D.M. College for Women, Nagapatinam, Rathinam College of Arts and Science College, Coimbatore for achieving excellence in teaching and learning to promote science programmes at under graduate level.

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